

New England Common Assessment Program

Released Items 2008

Grade 11 Reading

Reading

- 1 The root *pop* in the words <u>popular</u> and <u>populate</u> means
 - A. growth.
 - B. culture.
 - C. people.
 - D. order.

2 Which word **most** clearly shows that George was making fun of his brother?

I noticed George was _____ as his brother continued to talk.

- A. smiling
- B. beaming
- C. grinning
- D. smirking

Read this newspaper article to learn about a surprising twist in the campaign to control the spread of fire ants. Then answer the questions that follow.

In Texas, Everybody Hated Fire Ants—Until They Vamoosed Insect Experts Say Varmints Keep Other Pests in Line; An Explosion of Chiggers

Susan Warren

COLLEGE STATION, Texas—Entomology professor Burt Drees had just wrapped up his standard lecture to cattlemen on how to get rid of the much-despised fire ant when a rancher approached him with a question.

"What I really want to know is, 'How do we bring 'em back?"

A decade-long series of droughts haven't just wreaked havoc on Texas agriculture, they have also suppressed populations of the moisture-loving fire ants that have become a scourge to homeowners, landscapers, farmers and ranchers across the South. That might sound like a good thing, and, on balance, it is. But there is something to be said for the bugchomping fire ant. It can help control other pests, including cattle-plaguing ticks, and the drought is helping to drive that home.



Fire ants, which first traveled to the U.S. in shipping cargoes from Brazil in the 1930s, are indisputably nasty beasts. When a mound is disturbed, the ants swarm by the hundreds, covering feet and ankles in seconds and crawling up into clothes. The quarter-inch-long reddish-brown insects latch on to skin with their jaws, arch their backs and plunge in their stinger to inject a potent venom. They then pull out, rotate and sting again. The wound site burns and swells, then forms a blister that can itch for days. People allergic to the venom can go into anaphylactic shock and die.

The marauding ants devour young bird and reptile hatchlings, destroy electrical systems by nesting in motors and wiring boxes, and can blind or maim calves unlucky enough to be born next to a mound. The fire ant, which has spread across the southeast U.S. and into California in recent decades, costs the nation nearly \$6 billion annually in damage, lost revenue, and insect control measures, economists say.

It is hard for most people to imagine that there could be anything good to say about such a pest. But entomologists have known for some time that the fire ant's predatory habits can actually come in handy. The eggs and larvae of other harmful and annoying insects, including ticks, chiggers, fleas and cockroaches, make a tasty snack for ravenous fire ants. They benefit farmers by eating crop pests such as boll weevils and sugarcane borers. Where fire ants abound, populations of other pests can be reduced.

Montgomery, Texas, rancher Robert McGehee hates fire ants. The foot-high dirt ant-mounds often clog up his hay-cutting equipment, forcing him to climb down from his tractor and fight swarming ants to clean it out. Recently, he had to quickly strip off his ant-covered clothes in the middle of a cow pasture to keep from being eaten alive.

The dry spell plaguing Texas over the past four years has driven fire ants, which hate dry conditions, deeper underground. Dr. Drees, who works at Texas A&M University, surveyed Mr. McGehee's property

last week. He saw a dramatic reduction in ant mounds while other bug populations were surging.

As Mr. McGehee walked through one of his pastures on Wednesday, grasshoppers leaped up like popcorn popping around his feet. Chiggers, tiny biting mites, have exploded. "I caught a calf the other day that had ear ticks," he said. "I hadn't seen ear ticks in 30 years."

Don Goodman, a veterinarian in Navasota, Texas, said he has been fielding more calls about tick-infested pets and livestock in the past couple of years. Severe tick infestations once were a big problem for ranchers. Tick-covered cattle often get sick and waste away. Ear ticks can crawl deep into a cow's ear canal and cause deadly brain infections.

Kerrville, Texas, rancher Elmer Ahrens remembers a time when he couldn't use some pastures because the ticks were so thick "we couldn't even get out of the truck without being covered." But when the fire ants became a problem 20 years ago, the ticks began to disappear. "I actually dug some ants up and transplanted them in the tick area," Mr. Ahrens said.

Entomologists can't say for sure that the recent rise in other pesky insects results from the decline of the ants, but evidence is mounting as the drought and pesticide programs continue to reduce the ants' numbers.

Paul Nester, a fire-ant control specialist for the agricultural extension office in Houston, said he was happy to see an ant-targeted pesticide program eliminate 90% of the fire ants at a rural Girl Scout facility last year. But several months later, rangers reported they were suddenly having more problems with ticks, he said.

Saying nice things about fire ants hasn't been a very popular undertaking. When Mickey Eubanks, an entomologist at Auburn University in Alabama, wrote a 1999 exposition about fire ants titled, "Can bad bugs do good?" even his own father thought he was nuts, he said. The attitude has been: "Fire ants are bad. End of story," says Dr. Eubanks.

Understanding fire ants' full role in the environment—for good and bad—is becoming a more important job as global commerce spreads the easily transportable insect around the world. According to a recent study, the ants now have been spotted in Australia. Large parts of Europe, Asia and Africa are at risk. "They're here to stay, so we might as well know what the heck they're doing," Dr. Eubanks argues.

University of Georgia entomologist John Ruberson is studying how the underground activity of fire ants affects the soil. The tunneling ants are so numerous, they can move more earth than earthworms, loosening soil and getting more water and oxygen to plant roots. One way Southerners can spot fire ants is by the longer, greener grass growing up around their mounds.

In central Texas, a standard part of the vineyard tour at Messina Hof Winery includes a testimonial to what winery owner Paul Bonarrigo calls, "My friend, the fire ant." He has noticed that grapevines with a fire-ant mound at their base tend to be healthier than their neighbors. Since then, he has let the ants do their thing. Mr. Bonarrigo says he has had to use far less pesticide to combat other crop pests.

Another plus: "It's increased worker productivity by 50%," he said, "because nobody stands around anymore."

- 3 The word <u>havoc</u> most nearly means
 - A. confusion.
 - B. migration.
 - C. destruction.
 - D. extinction.
- **4** What has caused fire ants to disappear in the South?
 - A. the campaign to eliminate them
 - B. the change in the climate
 - C. the spread of their natural enemies
 - D. the replacement of farms by suburbs

- 5 The word <u>indisputably</u> refers to something that
 - A. cannot be argued.
 - B. cannot be understood.
 - C. cannot be prevented.
 - D. cannot be mentioned.
- 6 What is the main idea of paragraph 5?
 - A. Livestock are in danger from fire ants.
 - B. Fire ants have continued to spread.
 - C. Fire ants cause extensive damage.
 - D. Control of fire ants is expensive.

7 Create an **organizer** (list, chart, web, etc.) to show how fire ants are both harmful **and** helpful. Use information from the article in your organizer.

- **8** Why did Elmer Ahrens transplant some fire ants on his ranch?
 - A. to protect his most valuable crops
 - B. to use them to control another pest
 - C. to see if they would stop attacking livestock
 - D. to test if they could survive in a new environment
- **9** Based on the article, fire ants do **not** attack
 - A. fleas.
 - B. cattle.
 - C. people.
 - D. grasses.

- **10** Which observation by Paul Bonarrigo was intended to be humorous?
 - A. Grapevines with a fire-ant mound at their base are healthier.
 - B. He has not attempted to control the fire ants in his vineyard.
 - C. He has had to use far less pesticide to control other pests.
 - D. The productivity of his workers has greatly increased.
- **11** What is the **main** idea of the article?
 - A. Encouraging the spread of fire ants is a controversial idea.
 - B. The disappearance of fire ants has had some unexpected consequences.
 - C. Farmers and ranchers in Texas confront many problems with insects.
 - D. Scientists have a renewed interest in the behavior of fire ants.
- 2 Evaluate whether the author presents a clear and accurate picture of changing attitudes toward fire ants. Use information from the article to support your answer.

Read this Internet article to learn what happens when a pitcher throws a fast pitch. Then answer the questions that follow.

FIREBALL Physics

Have Baseball Pitchers Reached the Limit of Human Endurance?

Chris Jozefowicz

They're called fireballers or flamethrowers—pitchers who can throw a baseball 160 kilometers (100 miles) per hour or more. A baseball moving that fast takes less than half a second to travel from the pitcher's hand to the catcher's mitt.

When fireballers throw heat like that, they put their arms through one of the fastest motions the human body is capable of. Such a pitch subjects the arm to forces that put it near the breaking point. A 100-mph pitch may psych out a batter, but might it also be the upper limit an athlete can handle?

Who's Fastest?

Experts and fans argue over who has thrown the fastest pitch. The *Guinness Book of World Records* says it was Nolan Ryan, then with the California Angels, who threw a fastball 100.9 mph in 1974. Atlanta Braves pitcher Mark Wohlers was clocked at 103 mph in 1995, and just last year, Randy Johnson threw a baseball 102 mph while he was playing for the Arizona Diamondbacks. (Major League Baseball doesn't officially track pitch speed.)

Whether it was 101, 102, or 103, the important point is that the top pitching speed hasn't budged much even as athletes have become stronger over the past 30 years. To understand why, you need to know where the forces of a pitch come from and what parts of the body they put stress on.

Hurling Heat

The overhand pitching movement is highly complex. Much more than an arm is involved.

Muscles, tendons, ligaments, and joints—all the way from the toes to the fingers—work together.

"It's a continuous, fluid motion," says Glenn Fleisig, who studies biomechanics at the American Sports Medicine Institute in Birmingham, Ala.

Biomechanics is the science of how animals, including people, move.

A baseball pitch begins with the windup, when the pitcher lifts his or her leg and balances atop the mound. Next comes the stride—the pitcher steps forward. Fleisig says the legs are important power generators for a pitch. That power is then transferred through the pelvis, up the trunk to the shoulders, and out through the arm.

The pitcher's arm adds even more power to the throw. As the body is striding forward, the arm itself is cocking back. Eventually, the arm reaches a point where it is fully cocked and a large amount of torque (a force that causes rotation) is placed on the elbow. "It looks kind of sick," Fleisig admits.

As the forearm, hand, and ball rocket forward, the elbow straightens while the upper arm rotates at the shoulder in a motion similar to the one made during arm wrestling. Fleisig says the fastest pitchers reach a peak arm speed of about 7,500 degrees per second, or fast enough to rotate the arm completely (360 degrees) 21 times in one second!

Weak Link

The force that is necessary to move an arm that fast pulls ligaments (the fibrous tissues that connect bones to each other) and tendons (the fibrous tissues that connect muscles to bones) in the arm until they almost tear. For example, one short ligament in the elbow, the ulnar collateral ligament (UCL), connects the humerus, the bone in the upper arm, to the ulna, one of the two bones in the forearm. Fleisig has found that the best pitchers put about as much force on their UCL as it can take.

"If a pitcher were to do everything he could to get superstrong, muscles will get much stronger,"

Fleisig says, "but ligaments and tendons will only get a little stronger."

That limitation has led some commentators to suggest that pitchers who can throw 100 mph

will never be able to throw much faster. As Noam Scheiber recently wrote in Slate.com, "That 100-mph ceiling isn't an illusion—it's a basic property of human physiology."

- 13 The phrase psych out means to
 - A. intimidate.
 - B. impress.
 - C. analyze.
 - D. encourage.
- What is the main idea of the section Who's Fastest?
 - A. Experts and fans find it difficult to agree.
 - B. The speed of pitches cannot be measured.
 - C. Many pitchers are able to throw fast pitches.
 - D. The speed of pitches has barely increased since 1974.

- Based on the information in the article, which statement is true?
 - A. All baseball pitchers are in danger of injuring themselves.
 - B. Pitchers have learned more effective strategies in the past 30 years.
 - C. A successful pitch involves many parts of the body.
 - D. Rotating the upper arm stores the power needed for a fast pitch.
- According to the article, what limits a pitcher's ability to throw faster?
 - A. Pitchers cannot greatly increase the strength of ligaments and tendons.
 - B. The legs, pelvis, and shoulders cannot store a large amount of energy.
 - C. The elbow cannot endure more than a small amount of torque.
 - D. Pitchers do not understand how to increase their pitching strength.
- Using information from the article, describe the process of throwing a fast pitch and the possible problems a pitcher may experience doing so.

Acknowledgments

The New Hampshire, Vermont, and Rhode Island Departments of Education wish to acknowledge and credit the following authors and publishers for use of their work in the reading portion of the *New England Common Assessment Program*—2008.

"In Texas, Everybody Hated Fire Ants—Until They Vamoosed" (pp. 2–3) by Susan Warren, as it appeared in *The Wall Street Journal*, June 12, 2006. Copyright © 2006 by Dow Jones & Company. Published by Dow Jones & Company. Photograph copyright © BOBBY YIP/Reuters/Corbis Corporation.

"FIREBALL Physics: Have Baseball Pitchers Reached the Limit of Human Endurance?" (pp. 6–7) by Chris Jozefowicz as it appeared in *Current Science*, September 2005. Copyright © 2005 by Weekly Reader Corp. Published by Weekly Reader Corp.

Grade 11 Reading Released Item Information

Released Item Number	1	2	3	4	5	9	7	8	6	10	11	12
Content Strand ¹	ΛM	WV	WV	II	WV	II	П	IA	IA	VΙ	IA	IA
GSE Code	10-2	10-2	10-3	10-7	10-3	10-7	10-7	10-8	10-8	10-8	10-8	10-8
Depth of Knowledge Code	1	2	1	2	1	2	2	2	2	2	2	3
Item Type ²	MC	MC	MC	MC	MC	MC	CR	MC	MC	MC	MC	CR
Answer Key	С	D	C	В	А	С		В	D	D	В	
Total Possible Points	1	1	1	1	1	1	4	1	1	1	1	4

Released Item Number	13	14	13 14 15 16 17	16	17
Content Strand ¹	ΛM	II	II	II	Π
GSE Code	10-3	10-7	10-3 10-7 10-7 10-7 10-7	10-7	10-7
Depth of Knowledge Code	1	2	1	1	2
Item Type ²	MC	MC MC	MC MC	MC	CR
Answer Key	A	D	Э	A	
Total Possible Points	1	1	1	1	4

 $^{1}Content\ Strand:\ WV = Word\ ID/Vocabulary,\ LI = Literary/Initial\ Understanding,\ LA = Literary/Analysis\ \&\ Interpretation,$ $II = Informational/Initial\ Understanding,\ IA = Informational/Analysis\ \&\ Interpretation$

²Item Type: MC = Multiple Choice, CR = Constructed Response



New England Common Assessment Program

Released Items
Support Materials
2008

Grade 11 Reading

10.2	1 Students identify the meaning of unfamiliar vocabulary by using strategies to unlock meaning (e.g., knowledge of word structure) including prefixes/suffixes, common roots, or word origins; or context clues; or resources including dictionaries, glossaries, or thesauruses to determine definition, pronunciation, etymology, or usage of words; or prior knowledge)
	The root <i>pop</i> in the words <u>popular</u> and <u>opulate</u> means

- - A. growth.
 - B. culture.
 - C. people.
 - D. order.
 - 10.2.1 Students identify the meaning of unfamiliar vocabulary by using strategies to unlock meaning (e.g., knowledge of word structure) including prefixes/suffixes, common roots, or word origins; or context clues; or resources including dictionaries, glossaries, or thesauruses to determine definition, pronunciation, etymology, or usage of words; or prior knowledge)
- 2 Which word most clearly shows that George was making fun of his brother?

I noticed George was _____ as his brother continued to talk.

- A. smiling
- B. beaming
- C. grinning
- D. smirking

In Texas, Everybody Hated Fire Ants—Until They Vamoosed Informational Text

- 10.3.1 Shows breadth of vocabulary knowledge through demonstrating understanding of word meanings and relationships by identifying synonyms, antonyms, homonyms/homophones, shades of meaning, <u>idioms</u>, or word origins, <u>including words from dialects</u>, or other languages that have been adopted into our language/ <u>standard English</u>
- 3 The word <u>havoc</u> most nearly means
 - A. confusion.
 - B. migration.
 - C. destruction.
 - D. extinction.
 - 10.7.2 Demonstrate initial understanding of informational texts (expository and practical texts) by using information from the text to answer questions; to state the main/central ideas; to provide supporting details; to explain visual components supporting the text; or, to interpret maps, charts, timelines, tables, or diagrams
- 4 What has caused fire ants to disappear in the South?
 - A. the campaign to eliminate them
 - B. the change in the climate
 - C. the spread of their natural enemies
 - D. the replacement of farms by suburbs

In Texas, Everybody Hated Fire Ants—Until They Vamoosed Informational Text

- 10.3.1 Shows breadth of vocabulary knowledge through demonstrating understanding of word meanings and relationships by identifying synonyms, antonyms, homonyms/homophones, shades of meaning, <u>idioms</u>, or word origins, <u>including words from dialects</u>, or other languages that have been adopted into our language/ <u>standard English</u>
- 5 The word <u>indisputably</u> refers to something that
 - A. cannot be argued.
 - B. cannot be understood.
 - C. cannot be prevented.
 - D. cannot be mentioned.

- 10.7.2 Demonstrate initial understanding of informational texts (expository and practical texts) by using information from the text to answer questions; to state the main/central ideas; to provide supporting details; to explain visual components supporting the text; or, to interpret maps, charts, timelines, tables, or diagrams
- **6** What is the **main** idea of paragraph 5?
 - A. Livestock are in danger from fire ants.
 - B. Fire ants have continued to spread.
 - C. Fire ants cause extensive damage.
 - D. Control of fire ants is expensive.

In Texas, Everybody Hated Fire Ants—Until They Vamoosed Informational Text

- 10.7.3 Demonstrate initial understanding of informational texts (expository and practical texts) by organizing information to show understanding or relationships among facts, ideas, and events (e.g., representing main/central ideas or details within text through charting, mapping, paraphrasing, summarizing, comparing/contrasting, outlining
- 7 Create an **organizer** (list, chart, web, etc.) to show how fire ants are both harmful **and** helpful. Use information from the article in your organizer.

Scoring Guide:

Score	Description
4	Response shows a thorough understanding by organizing information to show how fire ants are both harmful and helpful. Response includes relevant information from the article in the organizer.
3	Response shows an understanding by organizing information to show how fire ants are both harmful and helpful. Response includes information from the article in the organizer.
2	Response shows a partial understanding by organizing information to show how fire ants are both harmful and/or helpful or by providing partial information. Response includes limited information from the article.
1	Response is vague or minimal.
0	Response is totally incorrect or irrelevant.
Blank	No response

Training Notes:

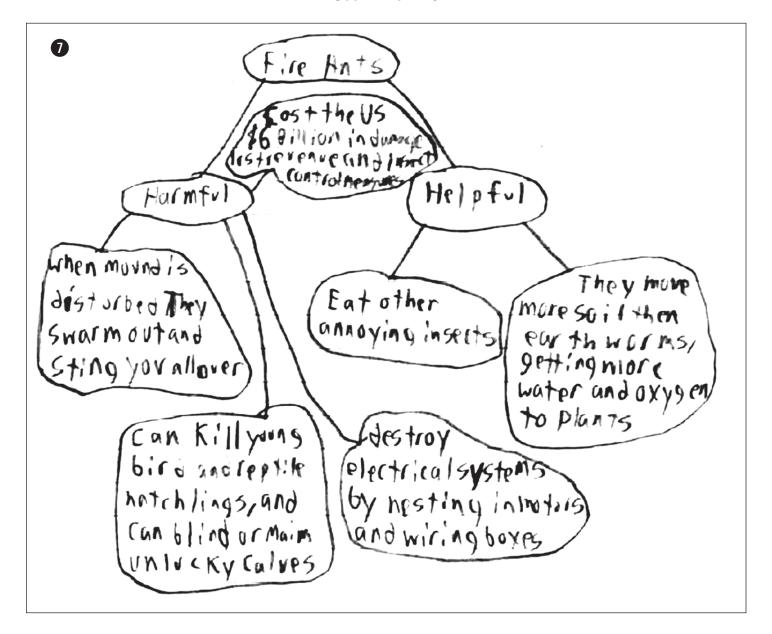
Response will likely demonstrate use of an organizer to show how fire ants are both harmful and helpful. The organizer may be a list, chart, web, summary, paraphrase, or another means to organize information.

Score Point 4

• Fire ants: Hown	ntyl or Helpful
	Helpful
· They sting and	· Eating crop posts
inject patent venom	· They eat ticks
· They cour kill	· Are good source of pest
· cost the U.S.	Rilling
6 billion dollars	· Eliminate the ability of cows
· destroy electrical	getting sick and wasted
systems	They loosen soil
· can blind or	· Help movement of oxygen
Maim calves	and water to plant mosts
· devour young kird	· Increase in grass growth
and reptile hatchlings	· Helps increase healthiness of
make did monds	grapevines
in fam areas	Don't allow workers to stand
· clay up Luy-cutting	
equipment	
only appear when their	
is no drought	
′	

Response shows a thorough understanding by organizing information to show how fire ants are both harmful and helpful. Response includes relevant information from the article in the organizer.

Score Point 3



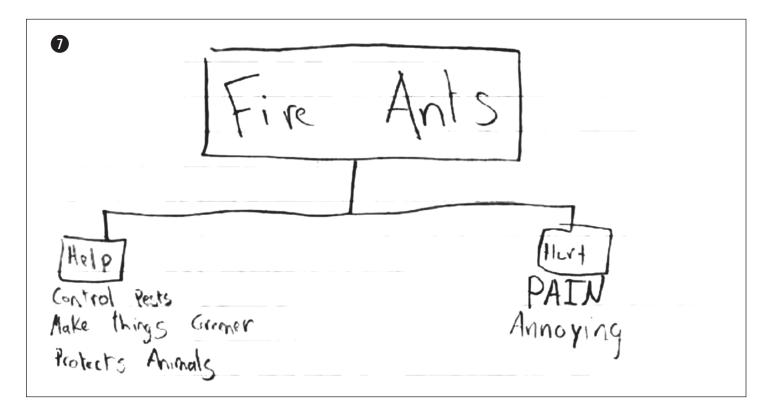
Response shows an understanding by organizing information to show how fire ants are both harmful and helpful. Response includes information from the article in the organizer.

Score Point 2

• Fire ont o	brogenizer.
Helpful	Harmful
· Can help control other	· lotch on to shin , and plunge
Pests	in their stinger to inject a
· Eat the eggs and larvae	potent venom (itch for days)
of other hamful insects	· Destroy electrical system by
	nesting
	· Their mounds clog up the
	former's equipment, such as
	hay-cutting machine
	ļ

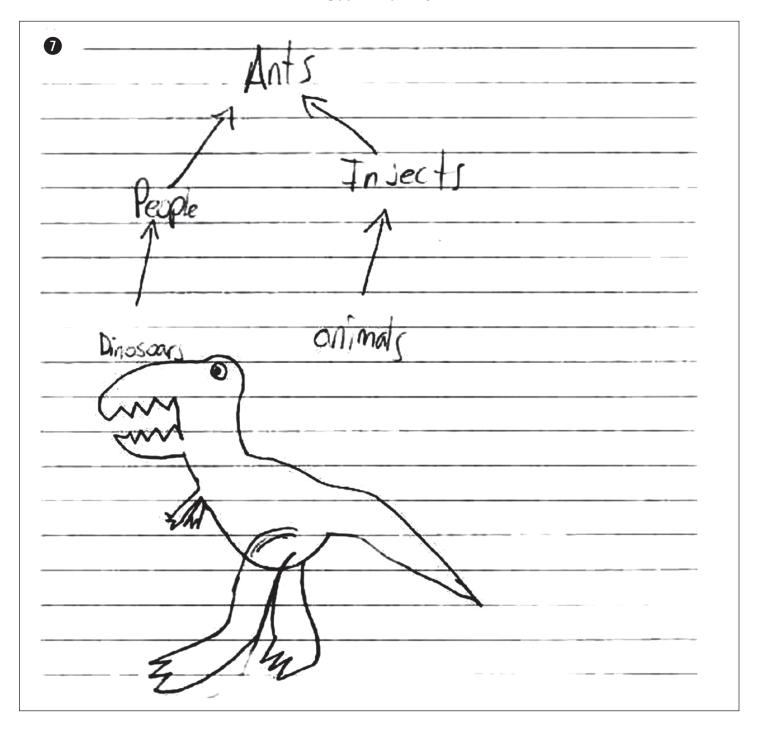
Response shows a partial understanding by organizing information to show how fire ants are both harmful and/or helpful **or** by providing partial information. Response includes limited information from the article.

Score Point 1



Response is vague or minimal.

Score Point 0



Response is totally incorrect or irrelevant.

In Texas, Everybody Hated Fire Ants—Until They Vamoosed Informational Text

- **10.8.1** Analyze and interpret informational text, citing evidence as appropriate by explaining connections about information *within* a text, *across* texts, or to related ideas
- **8** Why did Elmer Ahrens transplant some fire ants on his ranch?
 - A. to protect his most valuable crops
 - B. to use them to control another pest
 - C. to see if they would stop attacking livestock
 - D. to test if they could survive in a new environment

- **10.8.1** Analyze and interpret informational text, citing evidence as appropriate by explaining connections about information *within* a text, *across* texts, or to related ideas
- 9 Based on the article, fire ants do **not** attack
 - A. fleas.
 - B. cattle.
 - C. people.
 - D. grasses.

In Texas, Everybody Hated Fire Ants—Until They Vamoosed Informational Text

- 10.8.3 Analyze and interpret informational text, citing evidence as appropriate by drawing inferences about text, including author's purpose (e.g., to inform, explain, entertain, persuade) or message; or explaining how purpose may affect the interpretation of the text; or using supporting evidence to form or evaluate opinions/judgments and assertions about central ideas that are relevant
- Which observation by Paul Bonarrigo was intended to be humorous?
 - A. Grapevines with a fire-ant mound at their base are healthier.
 - B. He has not attempted to control the fire ants in his vineyard.
 - C. He has had to use far less pesticide to control other pests.
 - D. The productivity of his workers has greatly increased.
- 10.8.3 Analyze and interpret informational text, citing evidence as appropriate by drawing inferences about text, including author's purpose (e.g., to inform, explain, entertain, persuade) or message; or explaining how purpose may affect the interpretation of the text; or using supporting evidence to form or evaluate opinions/judgments and assertions about central ideas that are relevant
- What is the main idea of the article?
 - A. Encouraging the spread of fire ants is a controversial idea.
 - B. The disappearance of fire ants has had some unexpected consequences.
 - C. Farmers and ranchers in Texas confront many problems with insects.
 - D. Scientists have a renewed interest in the behavior of fire ants.

In Texas, Everybody Hated Fire Ants—Until They Vamoosed Informational Text

10.8.6 Analyze and interpret informational text, citing evidence as appropriate by evaluating the clarity and accuracy of information (e.g. consistency, effectiveness of organizational pattern, or logic of arguments)

2 Evaluate whether the author presents a clear and accurate picture of changing attitudes toward fire ants. Use information from the article to support your answer.

Scoring Guide:

Score	Description
4	Response provides a thorough evaluation with a clear judgment of whether the author presents a clear and accurate picture of changing attitudes toward fire ants. Response includes relevant information from the article.
3	Response provides an evaluation with a judgment of whether the author presents a clear and accurate picture of changing attitudes toward fire ants. Response includes some information from the article.
2	Response provides a partial evaluation or simply summarizes information from the article. Response includes limited information from the article.
1	Response is vague or minimal.
0	Response is totally incorrect or irrelevant.
Blank	No response

Training Notes:

Response will likely mention the personal opinions and firsthand accounts or the factual content included in the article. The evaluation must not only describe the information but also evaluate its effectiveness.

Score Point 4

The author does present a clear and accurate picture of changing attitudes toward fireant due to the fact that information supporting both sides of the arguement is provided. while examples of larmers and economists wno want fireants to be destroyed are given, ranchers and campers who are pro-ereant also are provided in the examples. The author uses the arguement of Robert Mc Genee who says that is. the foot-high dirt ant-mounds often clog up his hay-Cutting equipment ..., "in order to partray the opinion of one against fireants, but also provides the reader with the opinion of a contomologist studying the good effects of the ants. John Ruberan can move the earth... loosening soil and getting more water and organ to plant roots." The lack of bias toward one side of the debate enables me readen to get a good understanding of the compoversy

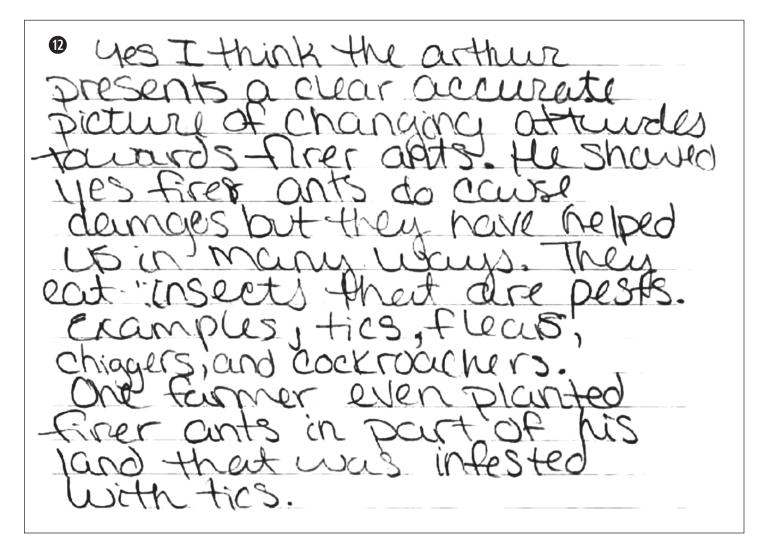
Response provides a thorough evaluation with a clear judgment of whether the author presents a clear and accurate picture of changing attitudes toward fire ants. Response includes relevant information from the article.

Score Point 3

Doth sides of the issue. She got quotes from people from both sides which gets both stories and opinions together. You can very plainly tell that one side wants to get rid of the fire-arts completely, and the other wants to bego them around. The arti-fire arts side makes points that fire arts cost the U.S. a lot of maney in damages and also they can be dangerous for people. The pro-fire arts side states that fire arts lielp keep gest populations down, such as ticks, cliggers cocknowns, and fleas. The author does a very good job of trying to inform people of the goods of fire arts and that people need to keep them around.

Response provides an evaluation with a judgment of whether the author presents a clear and accurate picture of changing attitudes toward fire ants. Response includes some information from the article.

Score Point 2



Response provides a partial evaluation or simply summarizes information from the article. Response includes limited information from the article.

Score Point 1

1 don't feel that the author presents
a clear picture of charging certifudes toward fire ants. If therasticke
some people want more of them
while others are still trying

Response is vague or minimal.

Score Point 0

not a good article because it

Response is totally incorrect or irrelevant.

Fireball Physics Informational Text

- 10.3.1 Shows breadth of vocabulary knowledge through demonstrating understanding of word meanings and relationships by identifying synonyms, antonyms, homonyms/homophones, shades of meaning, <u>idioms</u>, or word origins, <u>including words from dialects</u>, or other languages that have been adopted into our language/ <u>standard English</u>
- 13 The phrase psych out means to
 - A. intimidate.
 - B. impress.
 - C. analyze.
 - D. encourage.
- 10.7.2 Demonstrate initial understanding of informational texts (expository and practical texts) by using information from the text to answer questions; to state the main/central ideas; to provide supporting details; to explain visual components supporting the text; or, to interpret maps, charts, timelines, tables, or diagrams
- What is the main idea of the section Who's Fastest?
 - A. Experts and fans find it difficult to agree.
 - B. The speed of pitches cannot be measured.
 - C. Many pitchers are able to throw fast pitches.
 - D. The speed of pitches has barely increased since 1974.

Fireball Physics Informational Text

- 10.7.2 Demonstrate initial understanding of informational texts (expository and practical texts) by using information from the text to answer questions; to state the main/central ideas; to provide supporting details; to explain visual components supporting the text; or, to interpret maps, charts, timelines, tables, or diagrams
- Based on the information in the article, which statement is true?
 - A. All baseball pitchers are in danger of injuring themselves.
 - B. Pitchers have learned more effective strategies in the past 30 years.
 - C. A successful pitch involves many parts of the body.
 - D. Rotating the upper arm stores the power needed for a fast pitch.
 - 10.7.2 Demonstrate initial understanding of informational texts (expository and practical texts) by using information from the text to answer questions; to state the main/central ideas; to provide supporting details; to explain visual components supporting the text; or, to interpret maps, charts, timelines, tables, or diagrams
- 6 According to the article, what limits a pitcher's ability to throw faster?
 - A. Pitchers cannot greatly increase the strength of ligaments and tendons.
 - B. The legs, pelvis, and shoulders cannot store a large amount of energy.
 - C. The elbow cannot endure more than a small amount of torque.
 - D. Pitchers do not understand how to increase their pitching strength.

Fireball Physics Informational Text

- 10.7.3 Demonstrate initial understanding of informational texts (expository and practical texts) by organizing information to show understanding or relationships among facts, ideas, and events (e.g., representing main/central ideas or details within text through charting, mapping, paraphrasing, summarizing, comparing/contrasting, outlining
- Using information from the article, describe the process of throwing a fast pitch **and** the possible problems a pitcher may experience doing so.

Scoring Guide:

Score	Description
4	Response thoroughly describes the process of throwing a fast pitch and the possible problems. Response includes relevant details from the article.
3	Response describes the process of throwing a fast pitch and the possible problems. Response includes some relevant details from the article.
2	Response partially describes the process of throwing a fast pitch and/or the possible problems. Response includes limited details from the article.
1	Response is vague or minimal.
0	Response is totally incorrect or irrelevant.
Blank	No response

Fireball Physics Informational Text

Training Notes:

The description may include but is not limited to the information below.

The Process of Throwing a Fast Pitch

- To throw a fast pitch, a pitcher needs to use his/her arm, muscles, tendons, ligaments, and joints. The first step is the windup—the pitcher lifts his/her leg and balances on top of the pitcher's mound. The second step is the stride—the pitcher steps forward. "The power is then transferred through the pelvis, up the trunk to the shoulders, and out through the arm."
- As the body moves forward, the arm moves backward. The arm reaches a point at which it is fully cocked and a great deal of force is placed on the elbow.
- The ball takes less than half a second to go from the pitcher's hand to the catcher's glove.

Problems with Throwing a Fast Pitch:

The fast pitch puts a great deal of force on the arm and elbow. The ligaments and tendons cannot be built up like muscles can, so the ligaments and tendons can be damaged more easily than the muscles in a pitcher's arm.

Score Point 4

1 Throwing a fast pitch is a very complex
process which involves almost the entire
body. It all starts with the windup as the
pitcher lifts up their front leg and balances
on their back leg. Next, the pitcher
strides forward, generating a large
amount of force which is transferred all
the way to the portchest arm. Then the
arm cocks back, producing a huge
amount of force. As the pitcher
releases the ball by straightening out his
arm, all of this force is released,
sending the ball speeding through the air.
The problems with throwing such a fast pitch, is
that a ton of pressure is put on the tendons
and ligaments in the pitcher's arm. The UCL is
at the highest rist of being damaged, when
throwing a fastball, a pitcher is going through
throwing a fastball, a pitcher is going through the fastest and most stressful motions that
the human loody is capable of.

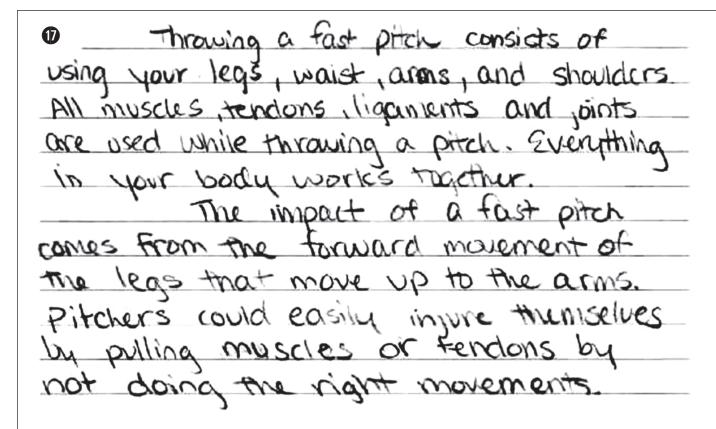
Response thoroughly describes the process of throwing a fast pitch and the possible problems. Response includes relevant details from the article.

Score Point 3

1 The problem with throwing a fast
place is in The ligaments and fundans. When in
the midst of a pitch the arm
is so twisted and bent in such
se small amount of time the ligariths
and tendons are stressed to the point
bys first and men the torses
but the arm gits most of the
bullying The elbow, especially, is
strained until it looks unnatural. The
pitcher's main problem is trying
pitcher's main problem is twing those ligaments and tendous that
and so important in a fast pitch.

Response describes the process of throwing a fast pitch and the possible problems. Response includes some relevant details from the article.

Score Point 2 (Example A)



Response partially describes the process of throwing a fast pitch and/or the possible problems. Response includes limited details from the article.

Score Point 2 (Example B)

The process of throwing a fast
pitch is very complex. Plaubas Count
and tendons but you can make them
and tendons but you can make them
pitch you are at risk of pulling. Some major muscles. You may ripor
pitch you are at risk of pulling
Some major muscles. You may ripor
tear tendons or ligaments which could
ruin your base ball caver you just have
to work at pitching and using your whole body to do good.
whole body to do good.

Response partially describes the process of throwing a fast pitch and/or the possible problems. Response includes limited details from the article.

Score Point 1

Dints. tendons, and listen From toe to the finger

Response is vague or minimal.

Score Point 0

word for the other one to make Ht becomes

ball is moving so fast that pur even tough it

Response is totally incorrect or irrelevant.